

IMPLEMENTING THE PROGRAM

TRANSPORTATION ASSET MANAGEMENT

Out the Door

Implementation involves getting done what you intended to do. MDOT's goal is to let the construction program within the first six months of a fiscal year. For MDOT to achieve identified goals and objectives, construction activities must be kept in line with the overall strategic plans.

Further, activities must be consistent with federal planning guidelines. These regulations define a detailed planning process leading directly to a list of projects that require approval by the metropolitan planning organizations in order to receive federal funds. The asset management process used by MDOT fulfills the requirements for development of a three-year *State Transportation Improvement Program* (STIP) through the development of a candidate project list.

Staying on Track

Once the program has been identified, MDOT uses two processes to keep projects on track, TRANSPORT and Field Manager.

TRANSPORT is a four-part application consisting of:

- **Proposal & Estimates System:** This addresses the needs of design and funding functions in the pre-letting phase of construction. The application allows the designer to prepare detailed estimates for highway construction projects, combine projects into proposals and select a group of proposals for a bid-letting package, all within an interactive, menu-driven system.
- **Letting and Award System:** This system assists highway agency personnel with advertising, processing and evaluating bids, and in making award decisions. The application provides online and batch data entry with full edit checking

and verification for vendor bids, produces the bid tabulation report and performs analyses on received bids. Additionally, it maintains the planholder list, produces mailing lists and maintains information to invoice vendors for proposals and plans purchased.

- **Construction Administration System:** This system manages contract information and contractor payments from award to final payment. The application offers a complete set of management information reports detailing construction progress. It also addresses the construction offices' needs regarding contractor payments, subcontract approval and tracking, and modifications to original contract specifications. It also includes the ability to track Disadvantaged Business Enterprise subcontractor and supplier information and payments.
- **Decision Support System:** The system contains a historical database specifically designed to provide decision support in bid review and evaluation, collusion detection, vendor (contractor) analysis, item price estimation, and planning and budgeting processes.

FIELD MANAGER

The second process to keep projects on track is Field Manager. This is the construction field office system that speeds contractor payments and minimizes field construction inspector paperwork. The system uses technology to offset decreases in MDOT staff and increases in the number of construction projects. This application manages and tracks construction projects for more than 700 statewide users. By reducing paperwork and speeding data entry by inspectors at project sites, Field Manager saves the department more than \$2.5 million annually.



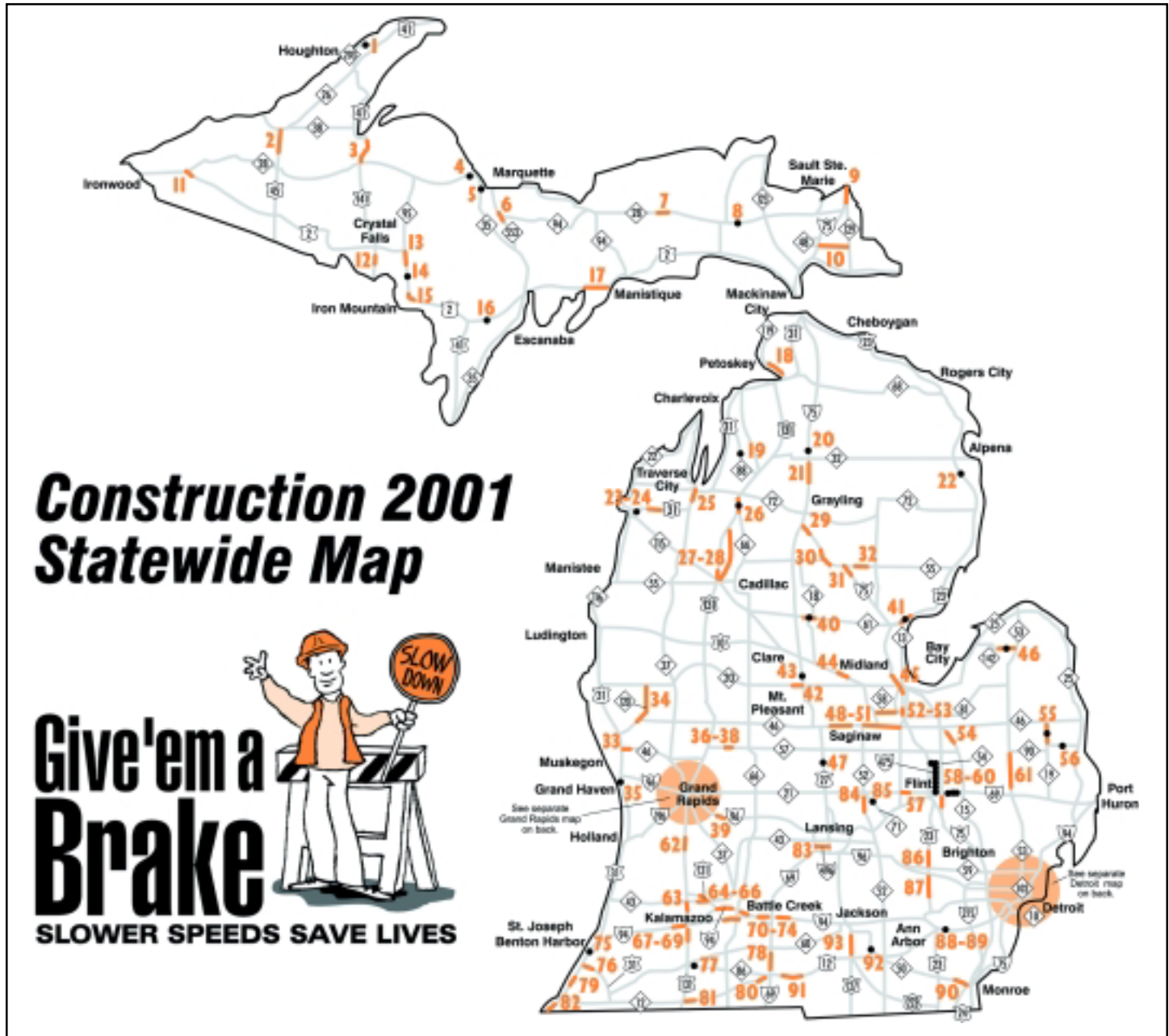
Implementation Impacts

The effect of these efforts is that MDOT is able to repair more miles of highways each year while continuing to streamline its internal operations. In 1996, more than 1,000 miles of state highways were rehabilitated.

This figure increased to 1,387 miles in 1997 and 1,511 miles in 1998.¹

Based on 1996 data, 64 percent of Michigan's state's highways were classified in "good" condition. By 1997, this figure increased to 70 percent for highways and 79 percent for bridges. Following the 1998

construction year, the highway figure showed an increase to 73 percent rated "good," with bridges at nearly 80 percent. In addition, the capital preventive maintenance program helped to extend the service life of 975 miles.



For Further Information -
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